

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing Of Claims:**

- 1.-13. (Canceled)
14. (New) An atomization system for a fuel, comprising:  
a fuel injector;  
an atomization tube including at least a first section and a second section, the first section having at least one of an outer diameter and a wall thickness that is different than that of the second section;  
an air inlet; and  
at least one metering aperture.
- 15 (New) The atomization system as recited in Claim 14, wherein:  
the atomization system is for charging a chemical reformer in order to obtain hydrogen.
16. (New) The atomization system as recited in Claim 14, wherein:  
an inner diameter of the first section is greater than an inner diameter of the second section.
17. (New) The atomization system as recited in Claim 14, wherein:  
the second section is formed at a downstream side of the first section.
18. (New) The atomization system as recited in Claim 17, wherein:  
in the second section, multiple bore holes are formed on multiple levels.
19. (New) The atomization system as recited in Claim 14, wherein:  
the second section is divided into multiple subsections.

20. (New) The atomization system as recited in Claim 19, wherein:  
the outer diameter of the atomization tube is greater in a first one of the subsections than in a second one of the subsections.
21. (New) The atomization system as recited in Claim 20, wherein:  
the second of the subsections coincides with a respective level.
22. (New) The atomization system as recited in Claim 21, wherein:  
a plurality of bore holes are formed in the second of the subsections.
23. (New) The atomization system as recited in Claim 18, wherein:  
the wall thickness of the first section equals the wall thickness of the second section.
24. (New) The atomization system as recited in Claim 23, wherein:  
diameters of the bore holes per level increase in a downstream direction.
25. (New) The atomization system as recited in Claim 14, wherein:  
an outer shaping of the atomization tube is achieved by turning on one of a lathe, a grinding machining, and an erosive machining.
26. (New) The atomization system as recited in Claim 18, wherein:  
a diameter of the bore holes is approximately 100  $\mu\text{m}$  to 250  $\mu\text{m}$ .
27. (New) The atomization system as recited in Claim 26, wherein:  
a ratio between a diameter and a length of the bore holes is at least equal to 1.